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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Supplemental **Notice of Allowability**	09/599,086	ROCKEY ET AL.
	Examiner	Art Unit	
	DENNIS G. BONSHOCK	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the Applicant's Amendment filed on 5-13-2009 and the Examiner's Amendment of 7-2-2009* .

2. ☒ The allowed claim(s) is/are *4-6,9-13,36-59,69-78 and 80*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some* c) ☐ None   of the:
        1. ☐ Certified copies of the priority documents have been received.
        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the
            International Bureau (PCT Rule 17.2(a)).
    * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
        Paper No./Mail Date _____.

  Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)
1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
    Paper No./Mail Date <u>5-14-09;5/25/04;6/24/04;11/6/06</u>
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
    Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with

Albert W. Vredeveld on 6-11-2009 and 7-2-2009.

The application has been amended as follows:

Replace the claim set of record with the below amended claim set:

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1.   (Canceled)

2.   (Canceled).

3.   (Canceled).

4.   (Previously Presented) The method of claim 6, wherein said at least one command is
displayed in a modeless fashion in which the user is able to continue to work within the
document while said at least one command is displayed.

5.   (Previously Presented) The method of claim 6 further comprising after automatically
causing the user interface to contain the context block, executing the at least one command
without requiring any action from the user other than selecting the at least one command.

6.   (Currently Amended) A method of exposing commands in a document-centric
application program executed by a computer, the method comprising:

automatically displaying, by the computer, a window on a display device, the window

generated by the document-centric application program, the document-centric application

program operating at the computer, the window containing a work area and a controls area, the

work area containing a document, the controls area not initially containing a context block;

storing, by the computer, Hyper-Text Markup Language (HTML) code that specifies a

title of the context block and a set of commands of the context block, the set of commands

executable by the document-centric application program, the title identifying a task, the set of

commands useful to a user in accomplishing the task;

storing a tree data structure, the tree data structure stored at the computer, the tree data

structure comprising an overall set of nodes, each node in the overall set of nodes being an

independent data structure, the overall set of nodes including a root node and a set of child

nodes, each node in the set of child nodes being a child of one other node in the overall set of

nodes, the overall set of nodes comprising a set of leaf nodes and a set of non-leaf nodes, no

node in the overall set of nodes being a child of any node in the set of leaf nodes, each node in

the set of non-leaf nodes having at least one child node in the overall set of nodes, the root node

not being a child of any node in the overall set of nodes, each node in the overall set of nodes

associated with a value, each node in the overall set of nodes associated with a[[n]] Boolean

expression, the Boolean expressions associated with each of node in the set of non-leaf nodes

taking as operands the values associated with each child node of the node, the set of leaf nodes

including a first leaf node and a second leaf node;

ascertaining, at the computer, whether a change has occurred to a position of a cursor, the

cursor being controlled by a user, the cursor being within [[a]] the document, ~~the document being~~

~~presented in a user interface, the computer displaying the user interface on a display device, the~~

~~user interface being generated by the document-centric application program,~~ the document being

worked on by the user;

ascertaining, at the computer, whether a change has occurred to selected text portions of

the document, the selected text portions of the document being portions of the document selected

by the user using the cursor;

in response to ascertaining that the change has occurred to the position of the cursor,

making, at the computer, a change to the value associated with the first leaf node;

in response to ascertaining that the change has occurred to the selected text portions of the document, making, by the computer, a change to the value associated with the second leaf node;

in response to a change to the value associated with any non-root node, using, at the computer, the <u>Boolean</u> expression associated with a parent node to make a determination whether to change a value associated with the parent node, the non-root node being in the set of child nodes, the parent node being a parent of the non-root node;

in response to making a determination to change the value associated with the parent node, changing, at the computer, the value associated with the parent node;

in response to determining that the value associated with the root node has changed from a first value to a second value, automatically causing, at the computer, <u>the controls area of</u> the user interface to contain [[a]] <u>the</u> context block<u>, the context block containing the title of the context block and the set of commands of the context block,</u> ~~context block containing at least one command,~~ the context block not obscuring the document, [[said]] at least one command <u>in the set of commands</u> selectable by the user to perform an action on the selected text portions of the document; and

in response to determining that the value associated with the root node has changed from the second value to the first value, automatically causing, at the computer, the user interface not to contain the context block.

7.   (Canceled).

8.   (Canceled)

9.   (Previously Presented) The method of claim 6, wherein said tree data structure pertains to a task the user is attempting to accomplish.

10.   (Previously Presented) The method of claim 6,

wherein said set of leaf nodes includes a third leaf node, the value associated with the third leaf node dependent on one or more of the following: a type of the document and a state of the document.

11.   (Currently Amended) The method of claim 6, wherein causing the user interface to contain the ~~content~~ context block comprises causing, by the computer, the user interface to contain the context block independent of the user selecting any displayed menu item.

12.   (Currently Amended) One or more computer-readable storage media having computer-readable instructions thereon which, when executed by a computer, cause the computer to:

automatically displaying, by the computer, a window on a display device, the window generated by the document-centric application program, the document-centric application program operating at the computer, the window containing a work area and a controls area, the work area containing a document, the controls area not initially containing a context block;

storing, by the computer at one or more computer-readable storage media, Hyper-Text Markup Language (HTML) code that specifies a title of the context block and a set of commands of the context block, the set of commands executable by the document-centric application program, the title identifying a task, the set of commands useful to a user in accomplishing the task;

store a tree data structure at the computer, the tree data structure comprising an overall set of nodes, each node in the overall set of nodes being an independent data structure, the overall set of nodes including a root node and a set of child nodes, each node in the set of child nodes being a child of one other node in the overall set of nodes, the overall set of nodes comprising a set of leaf nodes and a set of non-leaf nodes, no node in the overall set of nodes being a child of any node in the set of leaf nodes, each node in the set of non-leaf nodes having at least one child node in the overall set of nodes, the root node not being a child of any node in the overall set of nodes, each node in the overall set of nodes associated with a value, each node in the overall set of nodes associated with a[[n]] Boolean expression, the Boolean expressions associated with each of node in the set of non-leaf nodes taking as operands the values associated with each child node of the node, the set of leaf nodes including a first leaf node;

ascertain whether a change has occurred to selected text portions of [[a]] the document, ~~the document being presented in a user interface, the computer displaying the user interface on a display device, the user interface being generated by a document-centric application program operating on the computer,~~ the selected text portions of the document being portions of the document selected using a cursor, the cursor being controlled by a user, the document being a document in which the user is working;

in response to ascertaining that the change has occurred to the selected text portions of the document, make a change to the value associated with the first leaf node;

in response to a change to the value associated with any non-root node, use the Boolean expression associated with a parent node to make a determination whether to change a value associated with the parent node, the non-root node being in the set of child nodes, the parent node being a parent of the non-root node;

in response to making a determination to change the value associated with the parent node, change the value associated with the parent node;

in response to determining that the value associated with the root node has changed from a first value to a second value, automatically cause the controls area of the user interface to contain [[a]] the context block, the context block containing the title of the context block and the set of commands of the context block, ~~the context block containing at least one command,~~ the context block not obscuring the document, [[said]] at least one command in the set of commands of the context block being displayed in a modeless fashion in which the user is able to continue to work within the document while said at least one command is displayed, and wherein said at least one command in the set of commands of the context block is selectable by the user to perform an action on the selected text portions of the document; and

in response to determining that the value associated with the root node has changed from the second value to the first value, automatically cause the user interface not to contain the context block.

13.   (Previously Presented) The computer-readable storage media of claim 12,
        wherein the set of leaf nodes includes a second leaf node; and
        wherein the instructions further cause the computer to:

ascertain whether a change has occurred to a position of the cursor; and

in response to making ascertaining that the change has occurred to the position of

the cursor, making a change to the value associated with the second leaf node.

14.-35. (Canceled)

36.   (Currently Amended) A method of exposing commands in a document-centric software

application program executed by a computer, the method comprising:

automatically displaying, by the computer, a window on a display device, the window

generated by the document-centric application program, the document-centric application

program operating at the computer, the window containing a work area and a controls area, the

work area containing a document, the controls area not initially containing a context block;

storing, by the computer, Hyper-Text Markup Language (HTML) code that specifies a

title of the context block and a set of commands of the context block, the set of command

executable by the document-centric application program, the title identifying a task, the set of

commands useful to a user in accomplishing the task;

storing a tree data structure at the computer, the tree data structure comprising an overall

set of nodes, each node in the overall set of nodes being an independent data structure, the

overall set of nodes including a root node and a set of child nodes, each node in the set of child

nodes being a child of one other node in the overall set of nodes, the overall set of nodes

comprising a set of leaf nodes and a set of non-leaf nodes, no node in the overall set of nodes

being a child of any node in the set of leaf nodes, each node in the set of non-leaf nodes having at

least one child node in the overall set of nodes, the root node not being a child of any node in the

overall set of nodes, each node in the overall set of nodes associated with a value, each node in

the overall set of nodes associated with a[[n]] Boolean expression, the Boolean expressions

associated with each of node in the set of non-leaf nodes taking as operands the values associated

with each child node of the node, the set of leaf nodes including a first leaf node;

ascertaining, at the computer, whether a change has occurred to selected text portions of

[[a]] the document, the document being presented in a user interface, the computer displaying the

user interface on a display device, the user interface being generated by the document-centric

application program, the selected text portions of the document being portions of the document selected using a cursor, the cursor controlled by a user, wherein the document is a document in which the user is working;

in response to ascertaining that the change has occurred to the selected text portions of the document, making, at the computer, a change to the value associated with the first leaf node;

in response to a change to the value associated with any non-root node, using, at the computer, the <u>Boolean</u> expression associated with a parent node to make a determination whether to change a value associated with the parent node, the non-root node being in the set of child nodes, the parent node being a parent of the non-root node;

in response to making a determination to change the value associated with the parent node, changing, at the computer, the value associated with the parent node;

in response to determining that the value associated with the root node has changed from a first value to a second value, automatically causing, at the computer, <u>the controls area of</u> the user interface to contain [[a]] <u>the</u> context block<u>, the context block containing the title of the context block and the set of commands of the context block</u>, the computer causing the user interface to contain the context block independent of the user selecting any displayed menu item, the context block not obscuring the document, ~~the context block containing multiple commands,~~ each command in the <u>set of commands of the</u> context block being selectable by the user, at least one command in the <u>set of commands of the</u> context block being selectable by the user to perform an action on the selected text portions of the document;

in response to determining that the value associated with the root node has changed from the second value to the first value, automatically causing, at the computer, the user interface not to contain the context block.

37.   (Previously Presented) The method of claim 36, wherein each value associated with each node in the overall set of nodes is a Boolean value.

38.   (Previously Presented) The method of claim 36,

wherein the set of leaf nodes includes a second leaf node, the value associated with the second leaf node being based on one or more of the following: a type of the document, a state of the document, and objects within the document that are selectable by the user.

39.   (Currently Amended) The method of claim 36, wherein automatically causing the user interface to contain the context block comprises causing the context block to contain a title bar area, the title bar area ~~labeling~~ containing the title of the context block.

40.   (Original) The method of claim 39, wherein the title bar area is configured to enable the context block to be toggled between expanded and collapsed states.

41.   (Previously Presented) The method of claim 39, wherein the title bar area comprises a menu display button, the menu display button being configured to enable a menu, the menu associated with the context block.

42.   (Previously Presented) The method of claim 41, wherein the menu contains links to one or more context panes, each of the context panes comprising additional context-sensitive commands, each of the context panes being modeless.

43.   (Currently Amended) The method of claim 36, wherein the context block includes a ~~controls~~ command area that exposes the ~~multiple~~ set of commands of the context block to the user.

44.   (Currently Amended) The method of claim 43, wherein a command display within the ~~controls~~ command area is defined in Hypertext Markup Language (HTML).

45.   (Previously Presented) The method of claim 36, wherein automatically causing the user interface to contain the context block comprises displaying said context block in a modeless fashion.

46.   (Currently Amended) A method of exposing commands in a document-centric application program executed by a computer, the method comprising:

automatically displaying, by the computer, a window on a display device, the window generated by the document-centric application program, the window containing a work area and a controls area, the work area containing a document, the controls area not initially containing a context block;

storing, by the computer, Hyper-Text Markup Language (HTML) code that specifies a title of the context block and a set of commands of the context block, the set of commands executable by the document-centric application program, the title identifying a task, the set of commands useful to a user in accomplishing the task;

storing a tree data structure at the computer, the tree data structure comprising an overall set of nodes, each node in the overall set of nodes being an independent data structure, the overall set of nodes including a root node and a set of child nodes, each node in the set of child nodes being a child of one other node in the overall set of nodes, the overall set of nodes comprising a set of leaf nodes and a set of non-leaf nodes, no node in the overall set of nodes being a child of any node in the set of leaf nodes, each node in the set of non-leaf nodes having at least one child node in the overall set of nodes, the root node not being a child of any node in the overall set of nodes, each node in the overall set of nodes associated with a value, each node in the overall set of nodes associated with a[[n]] Boolean expression, the Boolean expression[[s]] associated with each [[of]] node in the set of non-leaf nodes taking as operands the values associated with each child node of the node, the set of leaf nodes including a first leaf node;

automatically ascertaining, at the computer, whether a change has occurred to selected text portions of the document, the selected text portions of the document being portions of the document selected by the user using a position of a cursor within a document, the document being presented in a user interface, the computer displaying the user interface on a display device, the user interface being generated by the document-centric application program, the cursor being controlled by a user, where the document is a document the user is working in;

in response to ascertaining that the change has occurred to the selected text portions of the document, the position of the cursor, making, at the computer, a change to the value associated with the first leaf node;

in response to a change to the value associated with any non-root node, using, at the computer, a <u>Boolean</u> expression associated with a parent node to make a determination whether to change a value associated with the parent node, the <u>Boolean</u> expression associated with the parent node taking as operands the values associated with each child node of the parent node, the non-root node being in the set of child nodes, the parent node being a parent of the non-root node;

in response to making a determination to change the value associated with the parent node, changing, at the computer, the value associated with the parent node;

in response to determining that the value associated with the root node has changed from a first value to a second value, automatically causing, at the computer, the <u>controls areas</u> <s>user interface</s> to contain [[a]] <u>the context block, the context block containing the title of the context block and the set of commands of the context block,</u> <s>set of commands, each command in the set of commands being able to assist the user in accomplishing a task, the set of commands</s> <u>the context block</u> not obscuring the document;

in response to determining that the value associated with the root node has changed from the second value to the first value, automatically causing, at the computer, the <u>controls area</u> <s>user interface</s> not to contain the <u>context block;</u> <s>set of commands;</s> and

while the <s>user interface</s> <u>controls area</u> contains the <u>context block,</u> <s>set of commands,</s> enabling, with the computer, the user to select and apply various commands in the set of commands <u>of the context block</u> to the document multiple times.

47.   (Currently Amended) The method of claim 46 further comprising applying, by the computer, one or more selected commands when selected by the user, without further user interaction, the selected commands being in the set of commands <u>of the context block</u>.

48.   (Currently Amended) The method of claim 46, wherein <u>automatically</u> causing the <s>user interface</s> <u>controls area</u> to contain the <s>set of commands</s> <u>context block</u> comprises causing, at the computer, the <s>user interface</s> <u>controls area</u> to display the <s>set of commands</s> <u>context block</u> responsive to the user selecting a menu item, the menu item being in a menu, the menu supported by [[a]] <u>the</u> context block<u>.</u> <s>, the context block containing the set of commands.</s>

49.   (Currently Amended) The method of claim 46, wherein causing the ~~user interface~~ controls area to contain the ~~set of commands~~ context block comprises displaying, by the computer, the context block ~~set of commands~~ in a modeless manner.

50.   (Currently Amended) The method of claim 46, wherein automatically causing the ~~user interface~~ controls area to contain the ~~set of commands~~ context block comprises displaying, by the computer, the ~~set of commands~~ context block within a context pane, the context pane having a title bar and a controls area, the title bar of the context pane labeling the context pane, the controls area of the context pane including the set of commands.

51.   (Original) The method of claim 50, wherein the context pane is not collapsible.

52.   (Original) The method of claim 50, wherein the context pane must be closed by the user.

53.   (Original) The method of claim 50, wherein the user must request the context pane to be displayed.

54.   (Previously Presented) The method of claim 50, wherein some commands in the set of commands are disabled.

55.   (Previously Presented) The method of claim 50, wherein the context pane includes a context-sensitive help feature, the context-sensitive help feature displaying help information, the help information contextually related to the context pane.

56.   (Previously Presented) The method of claim 55, wherein the context-sensitive help feature is accessible via an icon on the title bar.

57.   (Previously Presented) The method of claim 55, wherein the context-sensitive help feature is displayed in a modeless manner.

58.   (Original) The method of claim 50, wherein multiple context panes are stackable in a
queue.

59.   (Previously Presented) One or more computer-readable storage media having computer-
readable instructions thereon which, when executed by a computer, cause the computer to
perform the method of claim 46.

60.-68. (Cancelled).

69.   (Currently Amended) An electronic computing system comprising:

        one or more processing units;

        a display device; and

        a system memory storing:

                Hyper-Text Markup Language (HTML) code that specifies a title of a context

        block and a set of commands of the context block, the set of commands executable by the

        document-centric application program, the title identifying a task, the set of commands

        useful to a user in accomplishing the task;

                storing a tree data structure, the tree data structure comprising an overall set of

        nodes, each node in the overall set of nodes being an independent data structure, the

        overall set of nodes including a root node and a set of child nodes, each node in the set of

        child nodes being a child of one other node in the overall set of nodes, the overall set of

        nodes comprising a set of leaf nodes and a set of non-leaf nodes, no node in the overall

        set of nodes being a child of any node in the set of leaf nodes, each node in the set of non-

        leaf nodes having at least one child node in the overall set of nodes, the root node not

        being a child of any node in the overall set of nodes, each node in the overall set of nodes

        being associated with a Boolean value, each node in the overall set of nodes being

        associated with a Boolean expression, the Boolean expression associated with each of

        node in the set of non-leaf nodes taking as operands the Boolean values associated with

each child node of the node, the set of leaf nodes including a first leaf node, a second leaf node and a third leaf node; and

a single document-centric application program, the single document-centric application program being configured to:

cause the display device to display a single navigable window, the single navigable window containing <u>a work area, the work area containing</u> a document that a user is working in;

provide a plurality of functionalities, the user being able to navigate the single navigable window to each functionality in the plurality of functionalities;

cause the single navigable window to contain at least one context-sensitive command area, the context-sensitive command area not obscuring the document, <u>the context-sensitive command area not initially containing the context block</u>,

ascertain whether a change has occurred to a position of a cursor, the cursor being controlled by the user, the cursor being within the document;

ascertain whether a change has occurred to selected text portions of the document, the selected text portions of the document being portions of the document selected by the user using the cursor;

in response to ascertaining that the change has occurred to the position of the cursor, make a change to the Boolean value associated with the first leaf node;

in response to ascertaining that the change has occurred to the selected text portions of the document, make a change to the Boolean value associated with the second leaf node;

change the Boolean value associated with the third leaf node when the user changes between functionalities in the plurality of functionalities;

in response to a change to the Boolean value associated with any non-root node, use the Boolean expression associated with a parent node to make a determination whether to change a Boolean value associated with the parent node, the non-root node being in the set of child nodes, the parent node being a parent of the non-root node;

in response to making a determination to change the Boolean value associated with the parent node, change the Boolean value associated with the parent node;

in response to determining that the Boolean value associated with the root node has changed from a first value to a second value, automatically cause the context-sensitive command area to contain [[a]] the context block, the context block containing the title of the context block and the set of commands of the context block, ~~the context block containing at least one command, said~~ at least one command in the set of commands being selectable by the user to perform an action on the selected text portions of the document; and

in response to determining that the Boolean value associated with the root node has changed from the second value to the first value, automatically cause the context-sensitive command area not to contain the context block.

70.   (Previously Presented) The computing system of claim 69, wherein the single document-centric application program is configured to cause the single navigable window to contain navigation instrumentalities, the navigation instrumentalities being configured for use by the user to navigate the single navigable window to different functionalities in the plurality of functionalities.

71.   (Currently Amended) The computing system of claim 70, wherein one of the navigation instrumentalities comprises links, each of the links being associated with a functionality in the plurality of functionalities.

72.   (Currently Amended) The computing system of claim 70, wherein one of the navigation instrumentalities comprises browser-like navigation buttons, the browser-like navigation buttons being usable by the user to navigate the single navigable window between different functionalities in the plurality of functionalities.

73.   (Currently Amended) The computing system of claim 69, wherein each functionality in the plurality of functionalities comprises document-centric functionalities.

74.   (Currently Amended) An electronic computing system comprising:

a processing unit;

a display device; and

a system memory storing:

Hyper-Text Markup Language (HTML) code that specifies a title of a context block and a set of commands of the context block, the set of commands executable by the document-centric application program, the title identifying a task, the set of commands useful to a user in accomplishing the task;

a tree data structure, the tree data structure comprising an overall set of nodes, each node in the overall set of nodes being an independent data structure, the overall set of nodes including a root node and a set of child nodes, each node in the set of child nodes being a child of one other node in the overall set of nodes, the overall set of nodes comprising a set of leaf nodes and a set of non-leaf nodes, no node in the overall set of nodes being a child of any node in the set of leaf nodes, each node in the set of non-leaf nodes having at least one child node in the overall set of nodes, the root node not being a child of any node in the overall set of nodes, each node in the overall set of nodes being associated with a value, each node in the overall set of nodes being associated with a[[n]] Boolean expression, the Boolean expressions associated with each of node in the set of non-leaf nodes taking as operands the values associated with each child node of the node, the set of leaf nodes including a first leaf node;

a single document-centric application program, the single document-centric application, when executed at the processing unit, cause the processing unit to:

display, on the display device, a single navigable window, a user being able to use the single navigable window in navigating between multiple different functionalities provided by the single document-centric application program;

display a document in [[the]] a work area of the single navigable window;

display at least one context-sensitive command area in the single navigable window, the context-sensitive command area not obscuring the document, the context-sensitive command area not initially containing the context block;

ascertain whether a change has occurred to selected text portions of the document, the selected text portions of the document being portions of the document selected using a cursor, the cursor being controlled by the user,

in response to ascertaining that the change has occurred to the selected text portions of the document, make a change to the value associated with the first leaf node;

in response to a change to the value associated with any non-root node, use the Boolean expression associated with a parent node to make a determination whether to change a value associated with the parent node, the non-root node being in the set of child nodes, the parent node being a parent of the non-root node;

in response to making a determination to change the value associated with the parent node, change the value associated with the parent node;

in response to determining that the value associated with the root node has changed from a first value to a second value, automatically cause the context-sensitive command area to contain the context block, the context block containing the title of the context block and the set of commands of the [[a]] context block, ~~the context block containing at least one command, said~~ at least one command in the set of commands being [[is]] selectable by the user to perform an action on the selected text portions of the document; and

in response to determining that the value associated with the root node has changed from the second value to the first value, automatically cause the context-sensitive command area not to contain said context block. ~~at least one command.~~

75.   (Currently Amended) The computing system of claim 74, wherein the single document-centric application program is configured to cause the processing unit to provide navigation

instrumentalities associated with the single navigable window, the navigation instrumentalities being configured for use by the user to navigate the single navigable window to the different functionalities.

76.   (Original) The computing system of claim 75, wherein one of the navigation instrumentalities comprises links associated with each of the multiple different functionalities to which the single navigable window can be navigated.

77.   (Currently Amended) The computing system of claim 75, wherein one of the navigation instrumentalities comprises browser-like navigation buttons that can be used to navigate the single navigable window between the different functionalities.

78.   (Currently Amended) A computing method comprising:

storing, by the computer, at one or more computer-readable storage media, Hyper-Text Markup Language (HTML) code that a title of a context block and a set of commands of the context block, the set of commands executable by a document-centric application program, the title identifying a task, the set of commands useful to a user in accomplishing the task;

storing a tree data structure, the tree data structure being stored at a computer, the tree data structure comprising an overall set of nodes, each node in the overall set of nodes being an independent data structure, the overall set of nodes including a root node and a set of child nodes, each node in the set of child nodes being a child of one other node in the overall set of nodes, the overall set of nodes comprising a set of leaf nodes and a set of non-leaf nodes, no node in the overall set of nodes being a child of any node in the set of leaf nodes, each node in the set of non-leaf nodes having at least one child node in the overall set of nodes, the root node not being a child of any node in the overall set of nodes, each node in the overall set of nodes being associated with a Boolean value, each node in the overall set of nodes being associated with a Boolean expression, the Boolean expressions associated with each of node in the set of non-leaf nodes taking as operands the Boolean values associated with each child node of the node, the set of leaf nodes including a first leaf node and a second leaf node;

displaying, on a display device, a user interface, the user interface comprising a single navigable window capable of being navigated between multiple different functionalities provided by [[a]] the single document-centric application program, the single navigable window containing a word area and a controls area, the work area containing a document, the controls area not initially containing a context block;

receiving, at the computer, user input that indicates selection of a particular one of the functionalities;

responsive to receiving said user input, navigating, at the computer, the single navigable window to the particular one of the functionalities and displaying in said single navigable window indicia of said particular one of the functionalities, said particular one of the functionalities enabling a user to accomplish a task associated with the particular one of the functionalities;

in response to receiving said user input, changing, at the computer, the Boolean value associated with the first leaf node;

ascertaining, at the computer, whether a change has occurred to selected text portions of [[a]] the document, the selected text portions of the document being portions of the document selected by the user using a cursor;

in response to ascertaining that the change has occurred to the selected text portions of the document, making, at the computer, a change to the Boolean value associated with the second leaf node;

in response to a change to the Boolean value associated with any non-root node, using, at the computer, the Boolean expression associated with a parent node to make a determination whether to change the Boolean value associated with the parent node, the non-root node being in the set of child nodes, the parent node being a parent of the non-root node;

in response to making a determination to change the Boolean value associated with the parent node, changing, at the computer, the value associated with the parent node; and

in response to determining that the Boolean value associated with the root node has changed from a first value to a second value, automatically displaying, by the computer on the display device, [[a]] the context block in the controls area, the context block containing the title of the context block and the set of commands of the context block, the context block not

obscuring the document, the computer displaying the context block independent of the user

selecting any displayed menu item, ~~said context block containing~~ at least one command <u>in the set</u>

<u>of commands</u> selectable by the user to perform an action on the selected text portions of the

document; and

in response to determining that the value associated with the root node has changed from

the second value to the first value, automatically causing, by the computer, the user interface not

to contain the context block.

79.   (Canceled).

80.   (Currently Amended) A method of exposing commands in a document-centric

application program, the method comprising:

storing, at a system memory, a table containing a plurality of entries, each entry in the

plurality of entries specifying a context block in a plurality of context blocks and a visibility

expression in a plurality of visibility expressions, each visibility expression in the plurality of

visibility expressions represented as a tree data structure in a plurality of tree data structures,

each tree data structure in the plurality of tree data structures comprising an overall set of nodes,

each node in the overall set of nodes being an independent data structure, the overall set of nodes

including a root node and a set of child nodes, each node in the set of child nodes being a child of

one other node in the overall set of nodes, the overall set of nodes comprising a set of leaf nodes

and a set of non-leaf nodes, no node in the overall set of nodes being a child of any node in the

set of leaf nodes, each node in the set of non-leaf nodes having at least one child node in the

overall set of nodes, the root node not being a child of any node in the overall set of nodes, each

node in the overall set of nodes associated with a Boolean value, each node in the overall set of

nodes associated with a Boolean expression, the Boolean expression[[s]] associated with each

[[of]] node in the set of non-leaf nodes taking as operands the Boolean values associated with

each child node of the node,

<u>storing, at the system memory, Hyper-Text Markup Language (HTML) code that</u>

<u>specifies a title of each context block in the plurality of context blocks and a set of commands of</u>

<u>each context block in the plurality of context blocks, the sets of commands of the context blocks</u>

executable by the document-centric application program, the titles of the context blocks
identifying individual tasks in a plurality of tasks, the sets of commands of the context blocks
useful to a user in accomplishing the tasks identified by the titles of the context blocks,

wherein at least one tree data structure in the plurality of tree data structures includes a
leaf node associated with a Boolean expression dependent on a selected text portion of a
document, the selected text portion of the document being a portion of the document selected
~~position of a cursor controlled~~ by a user of a computer;

display, by the computer, a single navigable window containing a document area and a
command area, the command area not initially containing a context block in the plurality of
context blocks, the document area containing [[a]] the document, wherein ~~in which~~ the user is
working on the document;

evaluating, at the computer, each tree data structure in the plurality of tree data structures
by repeatedly:

selecting, at the computer, a current tree data structure in the plurality of tree data
structures; and

after selecting the current tree data structure, evaluating, at the computer, each
leaf node in the set of leaf nodes of the current tree data structure, wherein evaluating one
of the leaf nodes of the current tree data structure comprises: ~~comprising~~:

selecting, at the computer, an unevaluated leaf node in the set of leaf
nodes of the current tree data structure as a current node;

after selecting the unevaluated leaf node as the current node, evaluating, at
the computer, the Boolean expression associated with the current node;

after evaluating the Boolean expression associated with the current node,
determining, at the computer, whether the Boolean value associated with the
current node has changed;

(a) in response to determining that the Boolean value associated with the
current node has changed, determining, at the computer, whether the current node
is the root node of the current tree data structure;

(b) in response to determining that the current node is not the root node of the current tree data structure, setting, at the computer, a parent of the current node as the current node;

(c) after setting the parent of the current node as the current node, evaluating, at the computer, the Boolean expression associated with the current node;

(d) after evaluating the Boolean expression associated with the current node, determining, at the computer, whether the Boolean value associated with the current node has changed;

(e) in response to determining that the Boolean value associated with the current node has not changed, completing, at the computer, evaluation of the unevaluated leaf node;

(f) in response to determining that the Boolean value associated with the current node has changed, performing, at the computer, steps (a)-(f) again;

in response to determining that the current node is the root node of the current tree data structure, determining, at the computer, whether the Boolean value associated with the current node is changed and is a first Boolean value;

in response to determining that the Boolean value associated with the current node is changed and is the first Boolean value, automatically displaying, by the computer on [[a]] the display device, a given context block in the plurality of context blocks, [[a]] the given context block displayed in the command area, the given context block containing the title of the given context block and the set of commands of the given context block, the table containing an entry specifying the given context block and the visibility expression represented by the current tree data structure, the given context block containing at least one command selectable by the user to perform an action on the document; and

in response to determining that the Boolean value associated with the current node is changed and is not the first Boolean value, hiding, by the computer, the given context block associated with the current tree data structure from the command area.

81.-95. (Canceled).

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SUPPLEMENTAL REASONS FOR ALLOWANCE

1.   The following is an examiner's statement of reasons for allowance, correcting the

previous notice of allowance which mistakenly omitted claims 9, 43, and 44 from the

allowance:

2.   The examiner considered the Applicant's Amendment filed on 5-13-2009 and the

Examiner's Amendment of 7-2-2009 and after updated search, no other prior art of record has

taught that which was presented in the amended claims

3.   Therefore, claims 4-6, 9-13, 36-59, 69-78, and 80 are allowable.

4.   Independent claims 6, 12, 36, 46, 69, 74, 78, and 80, when considered as a whole, are

allowable over the prior art of record (Goldman and Donoho). Goldman teaches, in column 2,

line 29-41 and column 5, lines 30-36, associating menu items with context expressions, for use in

displaying relevant menu items to a user. Goldman teaches, in column 5, lines 21-29, context

blocks containing one or more commands (the File menu entry including new, open, save, etc.

and the Edit menu entry including cut, copy, paste, etc). Goldman teaches, in column 5, lines

47-53 and in figure 4, context expressions describing application window content a user is

currently interacting with. Goldman teaches, in column 5, lines 43-50 and column 6, line 65

through column 7, line 14, evaluating the expressions, when the application program creates a

new window on the display. Goldman teaches, in column 7, lines 4-14, displaying menu items

based on the evaluation. Goldman teaches, in column 2, lines 32-35 and in the Abstract,

determining which menu item to place in a window based on the content / context of that

window. Goldman is further supplemented by Donoho who further teaches, a system that

provides support on a computer system based on a user context (see column 3, lines 6-15), where

a consumer (user) is reading a document on a computer display and relevance based content

shapes the way the document is presented to the user (see column 88, lines 5-18), representing

messages to be presented as technical support as Boolean expressions (see column 18, lines 6-19,

column 25, lines 9-40 and figure 10), and further teaches, in column 2, lines 58-61, column 3,

lines 32-45, and in column 18, lines 5-27, continuously evaluating the poll of advice where each

element, in the pool, is an expression in formal relevance language. Donoho further teaches, in

column 17, lines 25-47, a system which periodically initiates synchronization to keep context

relevant data being displayed to the user, where gathering of information is initiated if the

directory has changed. Donoho further specifically states in this section an initial

synchronization ("first synchronization ever") and subsequent synchronizations (when the

"directory has changed"). Donoho teaches, in column 88, lines 5-18, a system in which a

consumer (user) is reading a document on a computer display where relevance based content

shapes the way the document is presented to the user. Donoho further teaches, in column 2, lines

9-23, a system that is initially evaluated and then reevaluated based upon the changing

conditions of the consumer, where information is brought to the attention of the consumer

exactly when it becomes applicable (further see column 2, lines 58-62).

However, specifically the prior art of record fails to clearly teach or support the

limitations of "*initially presenting a blank controls area, where HTML code is filled in*

dynamically specifying a title for a particular group of commands along with the set of

selectable commands, where the commands are provided in the controls area based upon

evaluation of a tree based expression structure, where when a change occurs to a user selected

text portion a value of a leaf node changes, and each time a value of a leaf node changes

notification is given to the parent when the root value changes a title and set of commands is

either added or removed from the controls area ".

5.   Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to DENNIS G. BONSHOCK whose telephone number is (571)272-

4047. The examiner can normally be reached on Monday - Friday, 6:30 a.m. - 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kieu Vu can be reached on (571) 272-4057. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dennis G. Bonshock/
Examiner, Art Unit 2173
8-10-09
dgb